

BERLIN.		(Professor Encke.)			
Aug. 21	Berlin M. T.	R. A.	Dec.		
	^h ^m ^s	^h ^m ^s	[°] ['] ["]		
	9 52 56.7	19 51 9.71	— 13 42 23.0	Mer.	Obs.
	10 46 31.1	8.04	42 31.7	Equat.	
	11 19 43.3	7.44	42 33.8	...	
22	11 1 17.2	50 27.33	44 22.5	...	
24	10 6 36.8	49 12.37	47 51.2	...	
30	11 28 20.2	19 46 6.61	— 13 58 32.2	...	

Elements of IRIS.

By Professor Challis.

“ From the observations extending from August 14 to August 27 inclusive, with Mr. Hind’s observations on August 13, I have computed the following normal positions of the planet, referred to the mean equinox of 1846.0.

Green. M. T.	Geoc. Long.	Geoc. Lat.
1847 Aug. 14.412018	298° 30' 35".1	+ 7° 7' 43".6
19.919315	297 24 46.0	7 10 2.4
26.094862	296 25 2.0	+ 7 9 41.2

“ These places have been corrected for aberration and parallax by means of Mr. Hind’s first elements ; and on the recommendation of Mr. Adams I have also eliminated the motion of the earth about the centre of gravity of the earth and moon, on account of its rapid variation in the interval over which the observations extend. From the above positions I obtained by Laplace’s method the following approximation to the elements of the planet’s orbit.

Mean Anomaly, 1847, Aug. 20.0	311° 16' 43".8	} M. Eq. 1847.0.
Long. of Perihelion.....	32 27 0.5	
Long. of Ascending Node	257 4 7.1	
Inclination	5 8 43.5	
Eccentricity	0.3068575	
Log. of Mean Distance	0.4055956	
Mean Daily Motion	874".2048	
Period in Sidereal Years.....	4 ^y .0588	

“ On comparing with the meridian observations of August 14, 19, 24, and September 1, the following differences remain, after correcting for aberration and parallax :

	R. A.	Cal.—Obs.	N. P. D.
Aug. 14	— 0.69	+ 4".5	
19	+ 0.40	+ 0.5	
24	+ 1.57	— 10.7	
Sept. 1	+ 4.83	— 16.8	

By Mr. Graham.

1847. September 00, G.M.T.

Mean Anomaly	303° 15' 34".73	
$\pi - \Omega$	139 38 24".62	} M. Eq. Sept. 0.
Ω	258 59 37".31	
i	5 23 43".41	
ϕ	14 48 29".45	
Log α	0.3869236	
μ	932".4407	

15.3 "These elements are based upon the observations of May 13, at the Regent's Park Observatory, and of August 28 and September 13, at Markree.

The Markree observations are:—

G. M. T.	R. A.	
Aug. 28.455677	296° 44' 58".7 + [9.2042] p	$-13^{\circ} 55' 1".9 + [9.9650] p$
Sep. 13.437374	295 54 23".1 + [9.3235] p	$-14 17 37".1 + [9.9645] p$

These elements give for August 28,

$$\text{Long. (Cal.—Obs.)} = -1".0$$

$$\text{Lat. (Cal.—Obs.)} = +0".1$$

By Professor Encke.

Epoch, 1847. August 21, 0^h Berlin M.T.

L	338° 45' 8".7	} M. Eq. June 0, 1847.
M	299 51 8".3	
π	38 54 0".4	
Ω	258 53 0".4	
i	5 22 33".8	
e	0.2502133	
Log α	0.3841122	
μ	941".5389	

By Mr. Hind.

Epoch, 1847. September 00, G.M.T.

Mean Anomaly	303° 9' 2".58	
π	38 36 28".57	} M. Eq. Sept. 0.
Ω	258 52 48".41	
i	5 22 41".75	
ϕ	14 43 10".80	
Log α	0.3858212	
μ	935".9978	
e	0.254090	

"The elements are based upon observations of August 15, 24, and Sept. 2. The errors on Sept. 10 were, Right Ascension +4".4, Declination $-5".1$, parallax allowed for."

By M. d'Arrest.

Epoch, August 13, at 12^h M.T. at Berlin.

M	297° 56' 17".89	} M. Eq. 1847°0.
π	38 49 56.94	
Ω	258 52 25.39	
i	5 22 16.58	
ϕ	14 28 44.64	
μ	942".37500	
Log α	0.3838552	

Observations of HEBE.

The discovery of a new planet by M. Henke, of Driessen, was announced in the last Number of the *Monthly Notices*. It has since been named *HEBE*, following, as we believe, the nomination of the illustrious Gauss, to whom the office was delegated by M. Henke.

BERLIN.

(Professor Encke.)

	Berlin M.T. h m s	R.A.	Dec.	
July 5	10 12 7.1 14 27.8	256° 51' 35".4 34.1	-4° 8' 29".2 8 27.8	Mer. Obs.
10	9 51 5.2 10 14 13.9	255 55 38.4 17.9	4 40 14.6 25.0	Mer. Obs.
12	10 41 39.2	255 35 3.0	-4 54 20.8	

ALTONA.

(Dr. Petersen.)

	Altona M.T. h m s	R.A.	Dec.
July 15	9 28 14.2	255° 8' 8".6	-5° 15' 47".1

HAMBURG.

(M. Rümker.)

	Hamburg M.T. h m s	R.A.	Dec.	
July 6	12 25 54.0	256° 38' 20".4	-4° 15' 31".3	
7	10 46 13.3	27 51.2	20 55.9	
9	13 22 1.2	256 4 24.5	34 38.0	
12	9 41 50.5	255 35 27.1	4 54 6.6	Mer. Cir.
14	32 44.7	16 51.9	5 8 26.9	...
15	9 28 13.7	255 8 6.0	15 49.5	..
16	10 18 6.4	254 59 26.7	23 32.0	Microm.
18	9 14 50.9 10 37 12.0	44 19.8 43 53.7	38 29.1 38 56.9	Mer. Cir.
20	10 17 19.9	30 11.9	5 54 40.3	
21	9 51 50.6	24 3.3	6 2 27.5	
25	10 6 27.1	254 3 3.6	35 36.5	8 obs.
27	27 13.6	253 55 3.3	6 52 35.0	7
29	37 15.5	48 59.3	7 9 58.7	8
30	10 34 2.5	253 46 35.1	-7 18 41.3	7